JUN 12 2006

### THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Tina Rademacher et al.

Serial No.:

10/562,422

Filed:

December 27, 2005 / Conf. No. 3869

Title:

TRANSMUCOSAL ADMINISTRATION FORM WITH REDUCED MUCOUS MEMBRANE IRRITATION

Examiner:

/ Art Unit:

Attorney File:

RO4126US (#90658)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-4150

### **LETTER**

Sir:

For inclusion in the record of the referenced patent application is an English translation of the "International Preliminary Report on Patentability" as rendered with respect to PCT/EP2004/006659 from which this is a 371 application.

Respectfully submitted,

DPH/ck

Enc.

D. Peter Hochberg

Reg. No. 24,603

### **Certificate of Mailing**

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I hereby certify that this document, and anything indicated as being attached or enclosed, is being deposited with the United States Postal Service as First Class mail in an envelope addressed: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on the date noted below.

Date: June 8, 2006

### PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

### PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

THE PARTY OF THE P	
Eingegangen	
FLACCUS, Rolf-Dieter Bussardweg 10 50389 Wesseling ALLEMAGNE	
FRIST:	

Date of mailing (day/month/year)
26 May 2006 (26.05.2006)

Applicant's or agent's file reference LTS 2003/004 PCT

International application No. PCT/EP2004/006659

IMPORTANT NOTIFICATION

International filing date (day/month/year) 19 June 2004 (19.06.2004)

Applicant

LTS LOHMANN THERAPIE-SYSTEME AG et al

l.	Transmittal	of the	translation	to	the applicant.
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7	The International Bureau transmits herewith a copy of the English translation of the international preliminary report of
_	patentability (Chapter I).

The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

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### PATENT COOPERATION TREATY

# Translation

### **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference  LTS 2003/004 PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416			
International application No.	International filing date (day/month/year)	Priority date (day/month/year)			
PCT/EP2004/006659	19.06.2004	27.06.2003			
International Patent Classification (IPC) or nat	ional classification and IPC				
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Applicant					
LTS LOHMANN THERAPIE	-SYSTEME AG				
		·			
This report is the international pred under Article 35 and transmitted to	iminary examination report, established by he applicant according to Article 36.	this International Preliminary Examining Authority			
2. This REPORT consists of a total of	4 sheets, inc	luding this cover sheet.			
3. This report is also accompanied by					
5-3	•	l to a fallows			
	d to the International Bureau) a total of 4				
sheets of the description sheets containing in Instructions).	iption, claims and/or drawings which have t ectifications authorized by this Authority (s	peen amended and are the basis for this report and/or ee Rule 70.16 and Section 607 of the Administrative			
	rsede earlier sheets, but which this Authorit	y considers contain an amendment that goes beyond			
the disclosure in Box.	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.				
Company the Intermedian	al Bureau only) a total of (indicate type and r	number of electronic carrier(s))			
6. (sent to the international	a Bureau oray) a total of (moreau type and t	ioniber of electronic current(s))			
, containing a sequence listing and/or tables					
related thereto, in compu Section 802 of the Admin		Supplemental Box Relating to Sequence Listing (see			
4. This report contains indications rel	ating to the following items:				
Box No. I Basis of t	he report				
Box No. II Priority		•			
	blishment of opinion with regard to novelty.	inventive step and industrial applicability			
Box No. III Non-esta	businment of opinion with regard to hoverly.	inventive step and industria apprecions			
	mity of invention				
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VI Certain o	locuments cited				
Box No. VII Certain o	lefects in the international application				
Box No. VIII Certain o	observations on the international application				
Date of submission of the demand	Date of completion	on of this report			
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N design of the control of the IDE A CED	Authorized office				
Name and mailing address of the IPEA/EP	Authorized office	•			
Facsimile No.	Telephone No.				

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/006659

Box	No. I		Basis of the report		
1.			to the language, this report is based on the international der this item.	application in the language in whic	h it was filed, unless otherwise
			port is based on translations from the original language is the language of a translation furnished for the purpos		·
		i	nternational search (Rule 12.3 and 23.1(b))		
		$\sqcup$	publication of the international application (Rule 12.4)		
			international preliminary examination (Rule 55.2 and/or		
2.	rece	n regard iving Oj report):	to the elements of the international application, this re ffice in response to an invitation under Article 14 are	port is based on (replacement sheet referred to in this report as "origin	s which have been furnished to the hally filed" and are not annexed to
ĺ		the int	ernational application as originally filed/furnished		
	$\boxtimes$	the de	scription:		
		pages	1-16		as originally filed/furnished
		pages	*	received by this Authority on	
		pages	*	received by this Authority on	<u> </u>
1	$\boxtimes$	the cl	aims:	•	
		nos.			as originally filed/furnished
		nos.*		as amended (together w	ith any statement) under Article 19
		nos.*	1-19		1.04.2005 with elefax
		nos.*		received by this Authority on	
		the d	trawings:		
1		sheet	-		as originally filed/furnished
		shee		received by this Authority on	
		shee			
	Г	7	quence listing and/or any related table(s) - see Supplem		ing
1	_	٦		Elital Box Relating to ocqueitee Elisa	<u></u>
3.		☐ The	amendments have resulted in the cancellation of:		
		屵	the description, pages		
		님	the claims, nos.	· · · · · · · · · · · · · · · · · · ·	
			the drawings, sheets/figs		
		님	the sequence listing (specify):		
			any table(s) related to sequence listing (specify):.		·-
4	. [	Thi the	s report has been established as if (some of) the ament y have been considered to go beyond the disclosure as fi	diments annexed to this report and li- iled, as indicated in the Supplementa	sted below had not been made, since il Box (Rule 70.2(c)).
			the description, pages		
			the claims, nos.		
			the drawings. sheets/figs		
			the sequence listing (specify):		
			any table(s) related to sequence listing (specify):		
	* <i>Ti</i>	f item 4	applies, some or all of those sheets may be marked "suj	perseded."	

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/006659

Box No. V Reasoned statement under Ar citations and explanations sup			rticle 35(2) with regard to novelty, inventive step or industrial applicability; apporting such statement		
1.	Statement				
	Novelty (N)	Claims	2, 15	YES	
		Claims	1, 3-14, 16-19	NO	
	Inventive step (IS)	Claims	•	YES	
		Claims	1-19	NO	
	Industrial applicability (IA)	Claims	1-19	YES	
	·	Claims		ио	
1			•		

2. Citations and explanations (Rule 70.7)

This report makes reference to the following documents:

D1: EP 0 386 960 A, which describes reversible thermosetting gel compositions with film-forming agents, water and pH regulation for the topical, transdermal and transmucosal treatment of diseases;

D2: WO 99/53897 A, which discloses pH-regulated film compositions for the vaginal treatment of HSV and HIV infections;

D3: EP 0 622 074 A, which discloses a transdermal composition for the administration of butyrophenones with a regulated pH value;

D4: Eaimtrakarn Sudarat *et alia*, International Journal of Pharmaceutics, Vol. 224, No. 1-2 (2001), pages 61-67, which describes how mucoadhesion is influenced by the nature of the film-forming polymer and by the pH value of the targeted organ;

D5: US 2003/091644 A1, which discloses peroxide and a pH-lowering, film-forming polymer for the treatment of vaginal infections.

If not indicated otherwise, reference is made to the passages mentioned in the search report.

International application No.
PCT/EP2004/006659

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Film-forming administration forms for the topical, transdermal and transmucosal administration of active substances are already known from D1-D5. They contain film-forming polymers and solvents (most often water), like the present application. The adaptation of the pH value of the composition as required is also already known from the prior art.

Mucous membranes, however, can take pH values of about 1 or less (for example in the human stomach) to about 9 (intestines). As a result, the definition of the pH value of the composition in connection with the pH value of the targeted mucous membrane is not restrictive over the prior art.

D4, in particular, points out that the polymer film is prepared by removing the solvent, mixing it with auxiliary substances, cutting it into parts of suitable size, then administered in dry form.

The subject matter of the present claims 1, 3-14 and 16-19 does not meet the requirements of PCT Article 33(1) and 33(2) for novelty.

Should it be possible to identify a specific novel composition, it might in certain circumstances be considered inventive in relation to the cited prior art (PCT Article 33(1) and 33(3)) because the citations do not address the problem of the irritation of the mucous membranes.